December '99 Volume 3.4

SHOT TALK

Preservative Free Hepatitis B

The San Antonio Metropolitan Health District (SAMHD) has received thimerosal-free hepatitis B vaccine and is providing it to all the birthing hospitals in Bexar County that are enrolled in the Vaccines for Children Program (VFC). This vaccine can be administered to eligible infants prior to discharge negating the need to postpone the birth dose of hepatitis B vaccine.

Infants should be vaccinated with the first dose of hepatitis B within 12 hours of birth. All infants born to HBsAg positive mothers should receive Hepatitis B Immune Globulin (HBIG) concurrently with the first dose of hepatitis B vaccine. Pre-term or low birth weight infants born to HBsAg negative mothers should receive hepatitis B vaccine, but ideally not until they are gestational age weight of at least 2 kilograms (5.5 pounds).

The Texas Department of Health (TDH) recommends that immunizations be administered according to the current Childhood Immunization Schedule, United States, January-December 1999, including hepatitis B vaccine. The current schedule recommends three doses of hepatitis B vaccine with the first dose administered to the newborn prior to the infant leaving the hospital. However, if the physician and parent wish to wait until the infant is two months old to begin the hepatitis B vaccine series, they may do so if the mother tests negative for the hepatitis B virus. For more information please contact Tom Gonzalez at 207-2088.

Flu Activity

Influenza season has begun and flu cases have been reported throughout the nation including cases reported in San Antonio. Two positive influenza A cultures were reported to the SAMHD in November as well as a positive flu antibody test result (type unknown).

Since the beginning of October, the SAMHD has provided over 18,500 influenza immunizations at various nursing, immunization and outreach clinics throughout Bexar County. Local HEB Pharmacies have administered over 7,000 flu immunizations. Davila Pharmacy has administered over 200 flu vaccines.

The SAMHD encourages persons 18 years of age and older to receive an annual flu shot as well as children suffering from chronic health conditions such as asthma, diabetes, and heart disease. From December through February, the SAMHD will continue to provide low cost flu shots at various clinics throughout the city. The cost is $5.00. Persons with Medicare Part B, Medicaid or CareLink are eligible to receive a flu shot at no cost but must show applicable card at the time of vaccination. The SAMHD will continue to offer pneumococcal and tetanus-diphtheria immunizations throughout the year. Call 207-8750 for a list of clinics providing these services

RSV Season Is Here

Respiratory Syncytial Virus (RSV) is the leading cause of lower respiratory tract infections in infants and young children. Each year, RSV is responsible for more than 90,000 hospitalizations and 4,500 infant deaths. RSV is ubiquitous, highly contagious, and potentially devastating to high-risk patients. The approval of Synagis™ (palivizumab) for intramuscular administration now provides healthcare professionals an effective RSV prophylaxis in infants and children with bronchopulmonary dysplasia (BPD) or premature birth (≤ 35 weeks gestation).

The SAMHD recommends that your patients born ≤35 weeks gestation be considered for this preventive measure since these infants have the highest risk for severe RSV disease. The SAMHD is currently administering Synagis™ to eligible children at the Main Immunization Center, located at 345 W. Commerce. In order to qualify for this product primary care physicians must refer infants to the SAMHD. The SAMHD administers Synagis™ by appointment only. For more information call Brenda Lemke at 207-6916.

Hepatitis A Study

The SAMHD is currently recruiting children ages: 11-13 months, 15-18 months, and 23-25

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months to participate in a SmithKline Beecham Hepatitis A clinical vaccine study. This study began in December and will evaluate the ability of a child's immune system to respond to hepatitis A vaccine. The study will evaluate the safety of the vaccine in children aged 11-13 months or 15-18 months, when compared to 23-25 month old children. The study will also determine the immune response to hepatitis A vaccine when given with other routine childhood immunizations. Children enrolled in this study will make four visits to the SAMHD over a seven-month period. During this time, they will receive all childhood immunizations free of charge as well as two doses of HAVRIX™ Hepatitis A vaccine.

The SAMHD will be participating in three other special vaccine projects this winter. These include a Comvax™ study from Merck, continuation of a VAQTA™ hepatitis A study from Merck, and Synagis™ from MedImmune. If you have any interested patients or questions on either study contact Brenda Lemke at 207-6916.

Rubella Susceptible Facts

Rubella is usually a mild disease characterized by a mild rash, swollen glands (usually suboccipital, postauricular, and cervical) slight fever and occasional joint pain. Symptoms are mild and 30-50% of cases may be subclinical or inapparent.

Rubella can be a disastrous disease in early gestation, leading to fetal death, premature delivery, and an array of congenital defects. As many as 85% of infants infected in the first trimester of pregnancy will be found to have been affected if followed after birth. Defects are rare when infection occurs after the 20th week of gestation. The overall risk of defects during the third trimester is probably no greater than that of uncomplicated pregnancies. Congenital defects may include deafness, cataracts, heart defects, microcephaly, mental retardation, bone alterations and liver/spleen damage.

Two doses of rubella vaccine, as a combination MMR vaccine are routinely recommended for all children by age four. **The first vaccination should be given when the child is at least 12 months of age. The second dose should be administered at four years of age. In response to questions concerning MMR immunizations administered prior to the first birthday, the Texas Department of Health Immunization Requirements for Children and Students, July 1999, states "Only MMR doses received on or after the first birthday will meet the MMR requirement for school entry."**

Persons can generally be considered immune to rubella if they have documentation of vaccination with at least one dose of MMR on or after the first birthday, have laboratory evidence of rubella immunity or were born before 1957. **WOMEN BORN BEFORE 1957 ARE NOT CONSIDERED RUBELLA IMMUNE IF THEY SHOULD BECOME PREGNANT.** Clinical diagnosis of rubella is unreliable and should not be considered in assessing immune status. The ACIP continues to recommend the vaccination of all adult women who do not have evidence of rubella immunity.

Women, who are pregnant or intend to become pregnant within three months, should not receive rubella vaccine. All other women should be vaccinated after being advised of the theoretical risks of vaccination during pregnancy and the importance of not becoming pregnant during the three months following vaccination. The ACIP continues to state that pregnant women should **NOT** be vaccinated, because of the small theoretical risk to the fetus. Women who are pregnant but discovered to be rubella-susceptible should be vaccinated after delivery. Breast-feeding is not a contraindication to rubella vaccination and does not alter rubella vaccination recommendations.

For more information on Rubella susceptibility you may contact Rose Vasquez, LVN at 207-2091 or Tom Gonzalez at 207-2088.

Sources: Atkinson, William, et al., Epidemiology and Prevention of Vaccine-Preventable Diseases, 5th edition, January 1999. American Academy of Pediatrics, 1997 Red Book Report of the Committee on Infectious Diseases, 24th edition, 1999.

Vaccine Administration Quiz

Test your knowledge about proper vaccine administration techniques by answering true or false to the following statements:

1. Subcutaneous injections are generally given perpendicular to the skin. T-F
2. No vaccine should be injected unless epinephrine is immediately available. T-F
3. The recommended needle size for an adult IM injection is 1-1½ inches. T-F
4. Never recap or clip needles prior to disposal. T-F
5. If both hepatitis A and B vaccines are indicated, it is acceptable to mix the two vaccines together in one syringe. T-F
6. MMR and varicella vaccines are both given subcutaneously. T-F
7. A new needle and syringe must be used for each vaccination. T-F
8. For SQ and IM injections, after you insert the needle into the limb, you should always pull back on the plunger before you inject the vaccine. T-F
9. Intramuscular injections should be inserted at a 90° angle to the skin. T-F
10. The proper needle length for a SQ injection in a child or adult is 5/8 to 3/4 inch. T-F
11. The vastus lateralis (lateral thigh) is the muscle of choice for administering a vaccine to a child under 12 months of age. T-F
12. When more than two IM vaccines are given to an infant at one visit, the gluteal (buttock) muscle may be used. T-F

See page 4 for the correct answers.

1999 Varicella Campaign

The SAMHD Immunization Division recently partnered with Merck to "kick-off" a Citywide

advertising campaign highlighting local efforts to promote vaccination against Chickenpox. The Immunization Division has made the varicella vaccine available to both public and private VFC providers since April 1997. Although the uptake of varicella vaccine was slow in the beginning, greater attention has been placed on the seriousness of the disease and the amount of time and money spent on complications associated with chickenpox.

SAMHD and Merck ran a two-month advertising campaign promoting both the varicella vaccine and the need to vaccinate against chickenpox. A promotional campaign was developed which included a billboard campaign, ads in over 500 VIA buses and over 10,000 posters, which were distributed to both public and private VFC providers. The ads were very 'catchy' and caught the attention of most providers in San Antonio. The ads in this column are examples.

How Many Varicella Deaths Will It Take?

In 1998, six people in Florida died of varicella. These cases are being printed to convince those health professionals who still believe varicella is a harmless disease to begin vaccinating their susceptible patients.

Case 1. On February 19, a healthy, unvaccinated 6-year-old boy developed a varicella rash, abdominal pain, malaise, and loss of appetite following exposure to a classmate with varicella. The child had asthma and intermittently had been on inhaled steroid therapy but had not received steroids within the previous month. On February 22, he was hospitalized with hemorrhagic skin lesions, tachycardia, tachypnea, and a platelet count of 89,000 (normal range: 150,000-350,000). Several hours after admission he developed pulmonary edema and respiratory insufficiency and required mechanical ventilation. He died on February 23. Tissue samples of multiple organs had a positive polymerase chain reaction for varicella zoster virus (VZV).

Case 2. On March 27, a healthy, unvaccinated 58-year-old woman developed a varicella rash. She was born in Cuba and had moved to the United States in 1995. She did not have a history of or known exposure to varicella. On April 3, she was hospitalized with a 5-day history of increasing shortness of breath and productive cough and was diagnosed with varicella pneumonitis. She was treated with intravenous acyclovir and ceftriaxone, but developed adult respiratory distress syndrome (ARDS) disseminated intravascular coagulopathy, renal failure, and coma. She died on April 20.

Case 3. On April 27, a healthy, unvaccinated 29-year-old man developed a varicella rash. In early April, his children had contracted varicella. On April 29, he sought care at a local emergency department for chest pain and respiratory distress. Chest radiographs showed bilateral pulmonary interstitial infiltrates. On April 30, he began coughing up blood, was intubated because of increasing respiratory insufficiency, and was treated with intravenous acyclovir and antibiotics. He developed sepsis, ARDS, and multiorgan failure, and died May 12.

Case 4. On May 5, a 21-year-old unvaccinated female employee at a family childcare center developed a varicella rash after exposure to a child with varicella. The employee had a history of asthma and was treated with 5 mg prednisolone per day. She was hospitalized on May 7 with varicella pneumonitis and received intravenous acyclovir on May 8, but she died the same day.

Case 5. On July 11, an 8-year-old unvaccinated boy developed a maculopapular rash diagnosed clinically as varicella and confirmed by direct fluorescent antibody test on July 23. He had acute lymphocytic leukemia (ALL) and had been on immunosuppressive therapy since receiving a bone marrow transplant on May 15. He had not had varicella and had no known varicella exposure. He was treated with varicella zoster immunoglobulin on July 16 and acyclovir on July 23. He died on July 25 after recurrence of leukemia with a graft-versus-host reaction complicated by disseminated varicella, cellulitis, ileus, and hypertension.

Case 6. On October 3, an unvaccinated 45-year-old man with diabetes mellitus, asthma, and cirrhosis of the liver developed a varicella rash. He was born in Cuba and had resided in the United States for 35 years. He had no history of varicella and no known exposure. He was not receiving steroids or immunosuppressive drugs. He was admitted to the hospital with varicella on October 5 and on October 6, treatment was initiated with oral acyclovir. He died on October 8; pathologic evidence from the postmortem examination revealed VZV in all major organs.

Five of the six case-patients who died because of varicella were eligible for vaccination. The sixth, a child with active ALL (case 5), was ineligible for vaccination. Under a special protocol, children with ALL who meet inclusion criteria may be vaccinated. Although one case-patient was receiving systemic steroids when she contracted varicella, the dose was not large enough to be a contraindication; varicella vaccine can be administered to adults receiving less than 20 mg prednisone per day or its equivalent, and to children receiving less than 2 mg per kg body weight per day or a total of less than 20 mg per day.

Two case-patients (2 and 6) were aged greater than 30 years and were born and raised in Cuba. The epidemiology of varicella in tropical regions differs from that in temperate regions. VZV is heat labile and may not survive and transmit well in warm climates. Clinicians should be aware of the greater susceptibility of adults to varicella when evaluating persons from tropical countries. For more information about the varicella vaccine you may contact Gloria Johnson, LVN, at 207-2863.

Source: Immunization Action Coalition June 4, 1999, MMWR May 14, 1999.

Puzzled About VFC?

Who's eligible and how can my staff keep VFC eligibility straight? This is probably the most frequently asked question about the Vaccines for Children Program. It may seem complicated but the eligibility

guidelines are based on age, insurance status and in some cases ethnicity.

Children age 0-18 are eligible if they fall into one of four categories:

✓ **Enrolled in Medicaid**
✓ **Uninsured (no health insurance)**
✓ **Underinsured (has health insurance that does not cover immunizations)**
✓ **American Indian or Alaskan Native**

You are not required to verify your patient's eligibility but you must screen for eligibility and document this on the immunization consent form. Patient's whose health insurance provides for routine immunizations **DO NOT** qualify for VFC vaccine. Patients that are 19 years of age or older, regardless of insurance status are not eligible for VFC vaccine unless their Hepatitis B series was started while eligible for VFC. For more information regarding the VFC program contact Vivian Flores at 207-2868.

Separate Programs Same Goal = Healthy Texans

The Vaccines for Children (VFC) Program and Texas Health Steps (THSteps) or Medicaid are separate programs run by different organizations. THSteps providers and other Medicaid providers, who immunize must enroll in the SAMHD's VFC program to receive federally supplied vaccine at no cost to the provider. Medicaid no longer reimburses for the cost of vaccine; however Medicaid does reimburse providers $5.00 for each vaccine given to a Medicaid recipient. Additionally, the Medicaid manual, page 39-4 states **"The screening provider is responsible for administration of Immunizations and may not refer children to local health departments to receive the immunizations"**.

Providers not enrolled in Medicaid or Texas Health Steps may enroll in VFC if they serve patients that are uninsured, under-insured, American Indian or Alaskan native. For more VFC information you may contact Vivian Flores at 207-2868.

Grow VFC Grow!!!

The VFC program continues to grow and would like to welcome our newest immunization partners: **Southwest Independent School District, Dr. John Garcia, Dr. Ninza Sanchez and Dr. Michael J. Dorsa.**

Welcome Aboard!

CASA Team Hard at Work

The Vaccines for Children Clinical Assessment Software Application (CASA) assessment team is working hard to contact VFC providers to conduct CASA assessments. An assessment provides invaluable information to providers on their immunization practice patterns and how it affects immunization rates of their patients. Providers also benefit from CASA assessments by receiving any missing immunizations on their patients that are found in the San Antonio Immunization Registry System. If you are interested in participating in an assessment, please contact Paul Fafoutakis at 207-8142.

Thank you to the following VFC Providers for their recent participation in CASA Assessment:

Dr. David Ochoa, Dr. Hugo Muzza, Health Texas Medical Group, Hills Medical Clinic, Dr. Luis Guimbarda, Dr. Leticia Alvarado, Battered Women's Shelter of Bexar County, South Texas Center for Pediatric Care and the San Antonio Metropolitan Ministries Shelter.

Quiz Answers:

1-F; 2-T; 3-T; 4-T; 5-F; 6-T; 7-T; 8-T; 9-T; 10-T; 11-T; 12-F.
Did you get an A+? If you missed any of these, you can find the answers in "Ask the Experts," in previous issues of NEEDLE TIPS, the AAP's 1997 Red Book, or ACIP statements.

Source: Immunization Action Coalition "Needle Tips" March 1999

Upcoming City Holidays

★ *Christmas Eve & Christmas Day December 24 -27, 1999*
★ *New Year's January 3, 2000*
★ *Martin Luther King Day January 17, 2000*
★ *President's Day February 21, 2000*

Immunization Program Contacts:

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Clinical Operations/Foreign Travel: Lynn Seeman, RN	207-8804
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VFC Coordinator: Vivian Flores	207-2868
Vaccine Ordering: Anthony Johnson	921-1178
Infant Action Plan/WIC Linkage: Pamela Williams	207-2869
Systems Analyst: Terry Boyd, MS	207-8792
CASA Coordinator: Paul Fafoutakis	207-8142
Vaccine Study Coordinator: Brenda Lemke, MHA	207-2859

Useful Web Addresses

SAMHD: ci.sat.tx.us/health
TDH: tdh.state.tx.us/
CDC: cdc.gov/

Thank You for Your Support!

Happy Holidays